NuSimData - Feature #25114

Merge of 2 branches into Nusimdata

10/23/2020 02:57 PM - Jacob Calcutt

Status: Closed Start date: 10/23/2020 **Priority:** Normal Due date: Lynn Garren % Done: 100% Assignee: Category: **Estimated time:** 0.00 hour Target version: Spent time: 2.00 hours

Description

There are 2 branches (feature/drivera_sparsify_margin and feature/drivera_processMap_CoulombScat_nCapture)

that have some changes to the MCParticle and MCTrajectory classes.

The MCParticle change in the first branch includes the exposure of an argument that controls the 'margin' allowed for sparsification within the MCTrajectory object.

The MCTrajectory change in the second branch includes the addition of 2 processes/keys in the trajectory process map.

Related issues:

Related to NuSimData - Feature #24373: MCParticle::SparsifyTrajectory() shoul... New 05/01/2020

History

#1 - 10/26/2020 10:19 AM - Kyle Knoepfel

- Assignee set to Lynn Garren
- Status changed from New to Assigned

#2 - 10/26/2020 12:10 PM - Lynn Garren

- Related to Feature #24373: MCParticle::SparsifyTrajectory() should take a margin option added

#3 - 10/26/2020 12:19 PM - Lynn Garren

The processes 'CoulombScat' and 'nCapture' will be added to the list of allowed processes in MCTrajectory. The default margin of 0.1 comes from what's in MCTrajectory by default (which is 0.1).

This will have an effect on some Geant4 reweighting machinery which is under development.

It is probable that NOvA will want this as well so that the reweighting is more accurate in general/possible for neutrons in particular.

#4 - 10/26/2020 03:18 PM - Lynn Garren

- Project changed from SciSoft to NuSimData

#5 - 10/27/2020 08:54 AM - Lynn Garren

- % Done changed from 0 to 100
- Status changed from Assigned to Resolved

A nulite v3_07_03 distribution is now available on SciSoft. It has been installed on the larsoft cvmfs and will be included in the upcoming larsoft release.

- nusimdata v1_21_03
- nuevdb v1_02_07
- nug4 v1 05 02
- nugen v1_10_10
- nutools v3_07_03
- geant4reweight v01_04_02

#6 - 02/09/2021 03:59 PM - Lynn Garren

- Status changed from Resolved to Closed

04/13/2021 1/1